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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/651,211	PYHALAMMI ET AL.
	Examiner	Art Unit	
	WILSON TSUI	2178	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 September 2009</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>14-16, 18-20, 22-37, 48- 49, 51, 52, 54-56, 58-60, and 62-67</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>14-16, 18-20, 22-37, 48,49,51,52, 54-56, 58-60 and 62-67</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   **Office Action Summary**   Part of Paper No./Mail Date 20091215

DETAILED ACTION

1.   This final action is in response to the amendments filed on: 09/10/09.

2.   Claims 1-13, 17, 21, 38-47, 50, 53, 57, and 61 are cancelled. Claims 14, 16, 22-24, 48, 49, 51, 52, 54, 55, 56, 62, 64, and 65 are amended. Thus claims 14-16, 18-20, 22-37, 48-, 49, 51, 52, 54-56, 58-60, and 62-67 are pending.

3.   The following rejections are withdrawn, in view of new grounds of rejection necessitated by applicant's amendment:

- Claims 14, 15, 18, 19, 20, 22, 23, 29, 30, 34, 54, 55, 64 and 65 rejected, under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al, in view of Moore et al.

- Claims 16, 25-27, 31, 32, 35-37, 56, 58-60, and 62 rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al, in view of Moore et al, and further in view of Rothmuller et al

- Claims 24, and 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al, in view of Moore et al, and further in view of Takahashi et al.

- Claim 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al, in view of Moore et al , and further in view of Wang et al

- Claim 48 rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al, in further view of Moore et al, and further in view of Nagaoka.

- Claims 49-52 rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al, in view of Moore et al, in view of Nagaoka, and further in view of Rothmuller et al.

- Claims 63, 66, and 67 rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al, in view of Moore et al, and further in view of Kobayashi et al.

Claim Rejections - 35 USC § 103
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 14, 15, 18, 19, 20, 22, 23, 25, 27, 29, 30, 31, 32, 34-37, 54-56, 58, 59, 60, 62, 64 are rejected, under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20, 2001), in view of Moore et al (US 20040189707, published: Sep. 30, 2004, filed: May 27, 2003), and further in view of Rothmuller et al (US Application: US 2003/0033296 A1, published: Feb. 13, 2003, filed: Jul. 17, 2002).

With regards to claim 14, Wilcock et al teaches *an apparatus, comprising:*

- *A memory* (paragraph 0158: whereas a server is used to store images and metadata)

- *A communications interface configured to connect to a user device through communication network;* (Fig 17, paragraph 00158: whereas, information is communicated through wireless GSM network) and

- *A processor configured to: control storage in the memory, of at least one image received from the user device through the communication network to the apparatus* (paragraph 0158: whereas, the server is used to store images and metadata), *each image having associated metadata categorizing said image according to at least two schemes, wherein said at least two schemes include at least one of an image date, an image location* (paragraph 0038: whereas, a date schema, and a location schema is implemented, such that they are stored in external storage, such as a server (paragraph 0158)), each image is *stored in a database at the memory, the database including at least one virtual folder corresponding to each of the at least two metadata schemes each image stored in a single location within memory* (Fig 3, paragraphs 0038, 0052, and 0053: whereas, when the images are stored in a database in memory, they include at least one virtual folder corresponding to a collective date, and location schema). However, Wilcock et al does not expressly teach *each virtual folder including a pointer to the image location; identify a calendar entry in a calendar application based on the image date of the at least one image; provide a suggestion for a metadata subject field of the at least one image based on the calendar entry; and, control providing of a user interface with the at least one virtual folder corresponding to each of the at least two metadata schemes, control displaying in the user interface simultaneous indications of years, months, and days that are available for sequential user selection; control displaying of an indication of selectable years for which there are stored images having metadata*

> *corresponding to an indicated year; control displaying of an indication of*
>
> *selectable months for which there are stored images having metadata*
>
> *corresponding to an indicated month; and control displaying of an indication of*
>
> *selectable days for which there are stored images having metadata*
>
> *corresponding to an indicated day.*

Yet, Moore et al teaches *each virtual folder including a pointer to the image location;*
and, control providing of a user interface with the at least one virtual folder
corresponding to each of the at least two metadata schemes (Abstract: whereas a user
interface is implemented such that virtual folders are implemented to allow for exposing
regular files and folders based on metadata. Whereas a user interface (paragraph 0014)
has at least one virtual folder that corresponds to at least two metadata
schemes/properties (claim 56 of Moore et al). The virtual folders can include files such
as photos/images (claim 58 of Moore et al)). Additionally, Moore et al teaches *control*
displaying in the user interface simultaneous indications of years, months, and days that
are available for sequential user selection (Fig 10, Fig 28, paragraphs 0129, 0130:
whereas, flexible filter options can be made available, including years, months, and
date); *control displaying of an indication of selectable years for which there are stored*
images having metadata corresponding to an indicated year (Fig 10: whereas, years
corresponding to stored images can be selected); *control displaying of an indication of*
selectable months for which there are stored images having metadata corresponding to
an indicated month (Fig 28: whereas months corresponding to stored images can be

selected)*; and control displaying of an indication of selectable days for which there are stored images having metadata corresponding to an indicated day* (Fig 29, paragraph 0104: whereas a specific day/or date can be used as a selectable filtering option).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al's image database storage and processing apparatus, such that the image storage system includes the ability to use virtual folders for specific schemes/metadata-combinations for accessing photos, as taught by Moore et al. The combination of Wilcock et al and Moore et al would have allowed Wilcock et al to have reduced the need for users having to search through a disk and make guesses as to where a file is stored (Moore et al, paragraph 0010).

However, Wilcock et al and Moore et al do not expressly teach *identify a calendar entry in a calendar application based on the image date of the at least one image; provide a suggestion for a metadata subject field of the at least one image based on the calendar entry;*

Yet, Rothmuller et al teaches *identify a calendar entry in a calendar application based on the image date of the at least one image* (whereas a calendar application is shown in Fig. 1, and as explained in paragraphs 0025-0026: one or more image entries with respect to a calendar date are identified with respect to date and subject field matching, and can be further displayed in an image area 100)*; provide a suggestion for a*

metadata subject field of the at least one image based on the calendar entry

(paragraphs 0025-0026: whereas, the at least one calendar image entries are retrieved, and suggested to the user based upon a quality match rating, such as a "best match" with respect to a subject/attribute field(s));

It would have been of obvious to one of the ordinary skill in the art to have modified Wilcock et al and Moore et al's method for image storage and retrieval, to have further helped a user locate/organize images through a designated calendar application/interface, as similarly taught by Rothmuller et al. The combination would have allowed Wilcock et al to have "made it easier to search, retrieve, or catalogue digital images, without having to remember/recall large amounts of information" (Rothmuller et al, paragraphs 0002-0003).

With regards to claim 15, which depends on claim 14, Wilcock et al teaches *wherein at least one of the schemes comprises image date* (as similarly explained in the rejection for claim 14, and is rejected under the same rationale). Additionally, Wilcock et al, Moore et al, and Rothmuller et al teaches *wherein the processor is further configured to perform steps comprising: control displaying information regarding images corresponding to the selected one or more indications of years, months, and days* (as similarly explained in the rejection for claim 14, whereas, Moore et al's display method further includes displaying one or more image/photo names with respect to a year selection (paragraphs 0104, 0128 of Moore et al).

With regards to claim 16, which depends on claim 14, Wilcock et al, Moore et al,

and Rothmuller et al teaches *wherein the information regarding images* as similarly

explained in the rejection for claim 15, and is rejected under the same rationale.

Additionally, Rothmuller et al teaches information regarding images *comprises*

thumbnail images of the images, (Fig 1, paragraph 0030: whereas, a user specifies in

the search criteria a lower bound and upper bound comprising a specific year, month,

and day by means of a time line, and the images are displayed as thumbnails in a user

interface).

With regards to claim 18, which depends on claim 14, Wilcock et al, Moore et al,

and Rothmuller et al teach wherein the processor is further configured to perform steps

comprising: control displaying of selecting a date component (such as a year) and

displaying upon selection of a year (as explained in the rejection for claim 14).

Additionally, Moore et al's teachings of using a user interface for selecting filtering/group

criteria, as discussed in the rejection for claim 14, further include selecting

filtering/group criteria such that the user interface displays *an indication of the months of*

the selected year *for which there are stored images having metadata corresponding to*

an indicated month (Fig. 28, Fig. 29, paragraphs 0129 and 130: whereas, based on one

or more filter criteria, a drop down list of available items is shown (such as a list of

available months, in a 'months group'). The filter criteria and list are dynamic with

respect to available documents/photos for various criteria/groups/stacks as explained in

paragraph 0088 and 0089). As explained in the rejection for claim 14, those criteria include years, months, and day(s)).

With regards to claim 19, which depends on claim 18, the combination of Wilcock et al, Moore et al, and Rothmuller et al similarly teaches teach control *displaying of, upon selection of a month, an indication of the days of the selected month for which there are stored images having metadata corresponding to an indicated day,* as similarly explained in the rejection for claim 18, and is rejected under similar rationale.

With regards to claim 20, which depends on claim 19, Wilcock et al, Moore et al, and Rothmuller et al similarly teaches control displaying of, *upon selection of a month, an indication of the days of the selected month for which there are stored images having metadata corresponding to an indicated day*, as similarly explained in the rejection for claim 18, and is rejected under the same rationale.

With regards to claim 22, which depends on claim 21, Wilcock et al, Moore et al, and Rothmuller et al teaches:

- *Control displaying of images corresponding to a selected date,* as similarly explained in the rejection for claim 14 (whereas, Rothmuller et al includes a user interface for displaying images, with respect to date) , *and* is rejected under similar rationale.

- *Designate, upon selection of a year or month prior to selection of a day, a day of the selected year or month in which there are available images,* as similarly explained in the rejection for claim 18, and is rejected under similar rationale.

- *Control displaying of, prior to selection of a day, information regarding images having metadata corresponding to the designated day* (whereas, as explained in the combination of Wilcock et al and Moore et al, for claim 14, Moore et al teaches a user interface for displaying and selecting. Additionally, Moore et al further teaches the displaying further includes displaying image/document names (Fig. 11) as a result from filtering, and that the displayed filtered list is updated as a result of a sequence of filtering (paragraphs 0129, and 0130)).

With regards to claim 23, Wilcock et al, Moore et al, and Rothmuller et al teaches: the processor is configured to choosing a day of the selected month in which there are available images, as similarly explained in the rejection for claim 18, and is rejected under the same rationale. However, Wilcock et al, Moore et al, and Rothmuller et al do not expressly teach randomly choose a day.

Yet, random data/number generation is well known in the art. The examiner takes OFFICIAL NOTICE of this fact.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al, Moore et al, and Rothmuller et al's method for designating/choosing a day, such that the day that is chosen using a random data/day

generation, as well known in the art. The combination would have allowed a user of

Wilcock et al's system to have automatically selected a day, for image selection/search.

With regards to claim 25, which depends on claim 14, the combination of Wilcock

et al, Moore et al, and Rothmuller et al teaches *providing a user interface to select a*

date component of a displayed region, as similarly explained in the rejection for claim

14.

Additionally, Rothmuller et al teaches control providing of a user interface to

select *a map subregion of a displayed map region, and* control displaying of, *upon*

selection of the map subregion, information regarding images having metadata

corresponding to the selected map subregion (Fig 1, reference numbers 100 and 250,

paragraph 0030: whereas a map of time is displayed in a timeline and a subregion/time-

period can be used to search for matching objects in a database, and information, such

as thumbnails are displayed).

With regards to claim 26, which depends on claim 25, the combination of Wilcock

et al, Moore et al, and Rothmuller et al teaches *the step of displaying, as part of the*

user interface to select a subregion, an indication of the subregions for which there are

stored images having metadata corresponding to an indicated subregion, as similarly

explained in the rejection for claim 25 (since the time line used indicates further

subregions that have metadata corresponding to an indicated subregion), and is

rejected under similar rationale.

With regards to claim 27, which depends on claim 25, the combination of Wilcock et al, Moore et al, and Rothmuller et al teaches *providing a user interface to select a sub-subregion of the selected subregion, the interface comprising an indication of the sub-subregions for which there are stored images having metadata corresponding to an indicated sub-subregion*, as similarly explained in the rejection for claim 25 (since the month of the calendar is indicative of a sub region, and there are marked days that indicate of particular sub-subregions for which there are stored images having metadata corresponding to an indicated sub-region), and is rejected under similar rationale.

With regards to claim 29, which depends on claim 14, Wilcock et al, Moore et al, and Rothmuller et al teaches *at least one date scheme, comprises, at least two subcategories (*one being a year of image creation, and the other being a month of image creation*)*, as explained in the rejection for claim 14, and is rejected under the same rationale. Additionally, the date scheme that Moore et al teaches further includes each *image* [being] *indexed by each applicable subcategory* (paragraph 0129 and 0130: whereas images are indexed according to years and days. The indexing accomplished through indexing by properties or "stacking" as explained in paragraph 0092).

With regards to claim 30, which depends on claim 29, Wilcock et al, Moore et al, and Rothmuller et al similarly teach *wherein the at least one scheme*, as similarly explained in the rejection for claim 14). Additionally, Moore et al's user interface

selection scheme, as explained in the rejection for claim 14, further includes the at least

one scheme *comprises image date, and wherein the subcategories comprise year of*

image creation and month of image creation (paragraph 0106: whereas documents

include photos/images, and those documents can be organized by year or date, as

shown in Fig 10, 28, and 29).

With regards to claim 31, which depends on claim 29, the combination of Wilcock

et al, Moore et al, and Rothmuller et al similarly teaches the each image being indexed

by an applicable subcategory, as explained in the rejection for claim 29.

Additionally, Rothmuller et al further teaches the subcategories to include a

scheme comprising *one or more image subjects* (paragraph 0025: whereas, an image

subject includes the subject of a photo/image)*, and wherein the subcategories*

comprises individual subjects of at least one multisubject image (paragraph 0025:

whereas an image subject further includes individual subjects, such as place or event

where the photo was taken.)

With regards to claim 32, which depends on claim 29, Wilcock et al, Moore et al,

and Rothmuller et al similarly teaches *at least one* scheme, as similarly explained in the

rejection for claim 29, and is rejected under similar rationale.

Additionally, Rothmuller teaches a scheme further *comprises image location*

(paragraph 0025: whereas, image location includes the city name)*, and wherein the*

subcategories comprises a region and a subregion (paragraph 0030: whereas, the

image location scheme, can further include subcategories of region (country) and

subregion (city) as explained in paragraph 0037).

With regards to claim 34, which depends on claim 14, the combination of Wilcock

et al, Moore et al, and Rothmuller et al teach a user interface for *receiving a selection,*

and *displaying information,* as similarly explained in the rejection for claim 14, and is

rejected under similar rationale. Furthermore, Moore's method for *selection and*

displaying as explained in the rejection for claim 14, further include *displaying*

information about images, and receiving a selection (Fig 10: whereas a filtered stack is

shown as information), *displaying information about images in a first image group* (Fig

28, paragraph 0129: whereas a filtered stack is updated when a filter selection is made,

such as a month group), *displaying information about additional image groups of which*

the first image is also a member (Fig 28: whereas, the image can be a member of

several image groups, the image groups shown by the selected filter options)*, and*

displaying upon selection from the additional image groups of a second image group,

information about images in the second image group (Fig 29, paragraph 0130: whereas

a filtered stack is updated for display when another image group such as a day image

group is selected from filter options), *receiving a selection of a first image from the first*

group and receiving a selection of a second image group from the additional image

groups (paragraphs 0129 and 0130: whereas based on a first selected image

group/filter, a second selection/filter is made from other filter options).

With regards to claim 35, which depends on claim 34, the combination of Wilcock et al, Moore et al, and Rothmuller et al teaches:

- *One of the schemes is one or more image subjects*, as similarly explained in the rejection fro claim 31, and is rejected under similar rationale.

The first image has associated metadata categorizing the image according to multiple subjects of the image, as similarly explained in the rejection for claim 31, and is rejected under similar rationale.

Additionally, as explained in the combination for claim 31, Rothmuller et al's schemes comprising one or more image subjects further include:

- *The first image group comprises other images having metadata corresponding to one of the multiple subjects* (Rothmuller et al, paragraph 0038: whereas, the first image group / "best match" group comprises other images having metadata corresponding to one of the multiple subjects/tags).

- *The second image group comprises images having metadata corresponding to another of the multiple subjects* (Rothmuller et al, paragraph 0038: whereas, the second image group , such as the "close match" group comprises images having metadata corresponding to another of the multiple subjects)

With regards to claim 36, which depends on claim 14, the combination of Wilcock, Moore et al, and Rothmuller et al teach:

wherein one of the schemes comprises image date (as similarly explained in the

rejection for claim 14, and is rejected under similar rationale), *and wherein the*

processor is further configured to perform steps comprising: providing a user interface

to select at least one date component comprising a year, a month or a day (as similarly

explained in the rejection for claim 15, and is rejected under similar rationale),

displaying information regarding images in a date-based group, each image in the date-

based group having metadata corresponding to the selected date component (whereas,

when a month is selected, information about the images corresponding to the month are

displayed, as similarly explained in the rejection for claim 18, is rejected under similar

rationale)*, receive a selection of an image in the date-based group* (as similarly

explained in the rejection for claim 34, and is rejected under similar rationale),

displaying information about first and second subject-based groups (as similarly

explained in the rejection for claim 34, and is rejected under similar rationale)

Additionally, Rothmuller et al teaches *one of the schemes comprises one or more*

image subjects (paragraph 0025: whereas, an image subject includes the subject of a

photo/image)*, the first subject-based group containing images having metadata*

corresponding to a first subject of the selected image (Rothmuller et al, paragraph 0038:

whereas, the first image group / "best match" group comprises other images having

metadata corresponding to one of the multiple subjects/tags)*, and the second subject-*

based group containing images having metadata corresponding to a second subject of

the selected image (Rothmuller et al, paragraph 0038: whereas, the second image

group , such as the "close match" group comprises images having metadata

corresponding to another of the multiple subjects), *receiving a selection of the first subject-based group, and displaying information regarding images in the first subject-based group* (Rothmuller et al, paragraph 0038: whereas, selecting first image group / "best match" group comprises other images having metadata corresponding to one of the multiple subjects/tags for retrieval/display (Fig 1)).

With regards to claim 37, which depends on claim 14, Wilcock, Moore et al, and Rothmuller et al teaches displaying information about images, as similarly explained in the rejection for claim 15. Additionally, Rothmuller et al further teaches the displaying of information about images further includes only displaying *stored images for multiple users, wherein the images are organized by user*: whereas, as explained in paragraph 0020, when a sharing profile is implemented such that pictures can only be shared between multiple users, when they certain user metadata conditions are satisfied).

With regards to claim 54, for a method, which is similar to the method performed by the apparatus of claim 14, is rejected under similar rationale.

With regards to claim 55, which depends on claim 54, for a method, which is similar to the method performed by the apparatus of claim 14, is rejected under similar rationale.

With regards to claim 56, which depends on claim 54, for a method that is similar to the method performed by the apparatus of claim 15, is rejected under similar rationale.

With regards to claim 58, which depends on claim 54, for a method that is similar to the method performed by the apparatus of claim 18, is rejected under similar rationale.

With regards to claim 59, which depends on claim 54, for a method that is similar to the method performed by the apparatus of claim 19, is rejected under similar rationale.

With regards to claim 60, which depends on claim 54, for a method that is similar to the method performed by the apparatus of claim 20, is rejected under similar rationale.

With regards to claim 62, which depends on claim 54, for a method that is similar to the method performed by the apparatus of claim 36, is rejected under similar rationale.

With regards to claim 64, Wilcock et al teaches an apparatus comprising:

A memory; a communications interface configured to connect to a user device through a communication network; and a processor configured to: store, in the memory, at least

one image received from the user device through the communication network, each

received image having associated metadata categorizing said image according to at

least two schemes, wherein said at least two schemes include at least one of an image

data, an image location and one or more image subjects, and each image is stored in a

database at the memory, the database including at least one virtual folder

corresponding to each of the at least two metadata schemes, as similarly explained in

the rejection for claim 14, and is rejected under similar rationale.

However, Wilcock et al does not expressly teach *each image being stored in a single*

location within the memory, and each virtual folder including a pointer of the image

location, wherein the processor is configured to identify, after selection of an image in

one virtual folder by a user, other images having metadata in common with the selected

image, wherein the common metadata is metadata other than the metadata utilized to

initially create the virtual folder; identify a calendar entry in a calendar application based

on the image date of the at least one image; provide a suggestion for a metadata

subject field of the at least one image based on the calendar entry; control providing of

a user interface with the at least one virtual folder; control displaying in the user

interface simultaneous indications of years, months and days that are available for

sequential user selection; control displaying of an indication of selectable years for

which there are stored images having metadata corresponding to an indicated year;

control displaying of an indication of selectable months for which there are stored

images having metadata corresponding to an indicated month; and control displaying of

an indication of selectable days for which there are stored images having metadata

corresponding to an indicated day.

Yet, Moore et al teaches *each image being stored in a single location within the*

memory, and each virtual folder including a pointer of the image location, wherein the

processor is configured to identify, after selection of an image in one virtual folder by a

user, other images having metadata in common with the selected image, wherein the

common metadata is metadata other than the metadata utilized to initially create the

*virtual folder (*Abstract: whereas a user interface is implemented such that virtual folders

are implemented to allow for exposing regular files and folders based on metadata.

Whereas a user interface (paragraph 0014, 0019) has at least one virtual folder that

corresponds to at least two or more metadata schemes/properties (claim 56 of Moore et

al), the one or more files selected by a user, and other images having metadata in

common with the selected filter property of one or more images are displayed upon

request. The virtual folders can include files such as photos/images (claim 58 of Moore

et al))). Additionally, Moore et al teaches *control providing of a user interface with the at*

least one virtual folder; control displaying in the user interface simultaneous indications

of years, months and days that are available for sequential user selection (Fig 10, Fig

28, paragraphs 0129, 0130: whereas, flexible filter options can be made available,

including years, months, and date)*; control displaying of an indication of selectable*

years for which there are stored images having metadata corresponding to an indicated

year (Fig 10: whereas, years corresponding to stored images can be selected)*; control*

displaying of an indication of selectable months for which there are stored images

having metadata corresponding to an indicated month (Fig 28: whereas months

corresponding to stored images can be selected); *and control displaying of an indication*

of selectable days for which there are stored images having metadata corresponding to

an indicated day (Fig 29, paragraph 0104: whereas a specific day/or date can be used

as a selectable filtering option).

It would have been obvious to one of the ordinary skill in the art to have modified

Wilcock et al's apparatus, to have further modified the image storage system, such that

an interface that implements virtual folders that show images having common metadata

for accessing photos, as taught by Moore et al. The combination of Wilcock et al and

Moore et al would have allowed Wilcock et al to have reduced the need for users having

to search through a disk and make guesses as to where a file is stored (Moore et al,

paragraph 0010).

However, the combination of Wilcock et al and Moore et al do not expressly teach

identify a calendar entry in a calendar application based on the image date of the at

least one image; provide a suggestion for a metadata subject field of the at least one

image based on the calendar entry;

        Yet, Rothmuller et al teaches *identifying a calendar entry in a calendar*

application based on the image date of the at least one image (whereas a calendar

application is shown in Fig. 1, and as explained in paragraphs 0025-0026: one or more

image entries with respect to a calendar date are identified with respect to date and

subject field matching, and can be further displayed in an image area 100); *providing a*

suggestion for a metadata subject field of the at least one image based on the calendar

entry (paragraphs 0025-0026: whereas, the at least one calendar image entries are

retrieved, and suggested to the user based upon a quality match rating, such as a "best

match" with respect to a subject/attribute field(s));

It would have been of obvious to one of the ordinary skill in the art to have

modified Wilcock et al and Moore et al's method for image storage and retrieval, to have

further helped a user locate/organize images through a designated calendar

application/interface, as similarly taught by Rothmuller et al. The combination would

have allowed Wilcock et al to have "made it easier to search, retrieve, or catalogue

digital images, without having to remember/recall large amounts of information"

(Rothmuller et al, paragraphs 0002-0003).

5.   Claims 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001,

filed: Feb. 20, 2001), in view of Moore et al (US 20040189707, published: Sep. 30,

2004, filed: May 27, 2003), in view of Rothmuller et al (US Application: US

2003/0033296 A1, published: Feb. 13, 2003, filed: Jul. 17, 2002), and further in view of

Takahashi et al (US Patent: 5,537,528, issued: Jul. 16,1996, filed: Feb. 16, 1993).

With regards to claim 24, which depends on claim 22, Wilcock et al, Moore et al, and Rothmuller et al teaches choosing /selecting the day in which there are images, as similarly explained in the rejection for claim 19, and is rejected under similar rationale. However, Wilcock et al, Moore et al, and Rothsmuller et al does choosing the first day in a numerically ordered series of days.

Takahashi et al teaches choosing images in chronological order (column 4, lines 33-47). It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al, Moore et al, and Rothmuller et al's day selection, such that the day is chosen in chronological order (thus choosing a first day among an ordered series of days), as taught by Takahashi et al. The combination would have allowed Wilcock et al to have "enabled the user to select and rearrange scenes" (column 4, lines 6-10).

With regards to claim 28, which depends on claim 14, Wilcock et al, Moore et al teach and Rothmuller et la to *groupe, upon designation of stored images by a user, the designated images into a user defined image folder,* as similarly explained in the rejection for claim 14, and is rejected under similar rationale. However, Wilcock et al, Moore et al, and Rothmuller et al do not expressly teach to *groupe, upon designation of stored images by a user, the designated images into a user-defined image folder, and grouping, upon designation of one or more image folders by a user, the designated folders into a higher level folder.*

However, Takahashi et al teaches *grouping, upon designation of stored images by a user, the designated images into a user-defined image* node*, and grouping, upon designation of one or more image* nodes *by a user, the designated* nodes *into a higher level* node (Fig 1a, Fig 1b: whereas, scenes are grouped upon designation of one or more nodes by a user, the designated nodes into a higher level node).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al, Moore et al, and Rothmuller et al's image folder storage system, such that the images are grouped into folders using a hierarchical grouping technique taught by Takahashi et al. The combination would have allowed Wilcock to have implemented image/scene "information indicative of a hierarchical relationship of ... scenes" (Takahashi et al, claim 3).

6.   Claim 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20, 2001), in view of Moore et al (US 20040189707, published: Sep. 30, 2004, filed: May 27, 2003), in view of Rothmuller et al (US Application: US 2003/0033296 A1, published: Feb. 13, 2003, filed: Jul. 17, 2002), and further in view of Wang et al (US Patent: 5,802,361, issued: Sep. 1, 1998, filed: Sep. 30, 1994).

With regards to claim 33, which depends on claim 14, Wilcock et al, and Moore et al teach *selecting an image*, as similarly explained in the rejection for claim

However, Wilcock et al, and Moore et al do not expressly teach expressly teach to *identify, after selection of an image by a user, other images having metadata in common with the selected image, wherein the common metadata is metadata other than the metadata utilized to initially search for the selected image.*

Wang et al teaches to *identify, after selection of an image by a user, other images having metadata in common with the selected image, wherein the common metadata is metadata other than the metadata utilized to initially search for the selected image* (column 27, lines 1-10: whereas, the user selects an image, metadata/attributes of other images having metadata/attributes in common with the selected image(s), are identified).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al, Moore et al, and Rothmuller's image selection system, to have further included the ability to identify other images having metadata in common with one or more selected images, as taught by Wang et al. The combination would have allowed Wilcock et al to have "retrieved images according to their similarity measures" (Wang et al, Abstract).

7.   Claim 48, 49, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20, 2001), in view of Moore et al (US 20040189707, published: Sep. 30, 2004, filed: May 27, 2003), in view of Rothmuller et al (US Application: US

2003/0033296 A1, published: Feb. 13, 2003, filed: Jul. 17, 2002), and further in view of

Nagaoka (US Patent: 6992710, issued: Jan. 31, 2006, filed: Mar. 2, 2001).

With regards to claim 48, Wilcock et al teaches *a server, comprising:*

Controlling storage of images transmitted through the wireless communication

network in a memory (paragraph 0158: whereas, the server is used to store images

and metadata), *each image having associated metadata categorizing said image*

according to at least two schemes, wherein said at least two schemes include at

least one of an image date, an image location (paragraph 0038: whereas, a date

schema, and a location schema is implemented, such that they are stored in

external storage, such as a server (paragraph 0158)), *and the images are stored in a*

database having at least one virtual folder corresponding to each of the at least two

metadata schemes (Fig 3, paragraphs 0038, 0052, and 0053: whereas, when the

images are stored in a database in memory, they include at least one virtual folder

corresponding to a collective date, and location schema). However, Wilcock et al

does not expressly teach *a copy of each image being stored in a single location*

within the memory, each virtual folder including a pointer to the image location,

identifying a calendar entry in a calendar application based on the image date of at

least one image, providing a suggestion for a metadata subject field of the at least

one image based on the calendar entry, controlling providing of a user interface with

the at least one virtual folder, controlling displaying in the user interface

simultaneous indications of interface of years, months, and days that are available

for sequential user selection, controlling displaying of an indication of selectable
years for which there are stored images having metadata corresponding to an
indicated year, controlling displaying of an indication of selectable months for which
there are stored images having metadata corresponding to an indicated month, and
controlling displaying of an indication of selectable days for which there are stored
images having metadata corresponding to an indicated day.

However, Moore et al teaches *controlling providing of a user interface with the at
least one virtual folder* (Abstract: whereas a user interface is implemented such that
virtual folders are implemented to allow for exposing regular files and folders based
on metadata. Whereas a user interface (paragraph 0014) has at least one virtual
folder that corresponds to at least two metadata schemes/properties (claim 56 of
Moore et al), *controlling displaying in the user interface simultaneous indications of
interface of years, months, and days that are available for sequential user selection*
(Fig 10, Fig 28, paragraphs 0129, 0130: whereas, flexible filter options can be made
available, including years, months, and date), *controlling displaying of an indication
of selectable years for which there are stored images having metadata
corresponding to an indicated year* (Fig 10: whereas, years corresponding to stored
images can be selected), *controlling displaying of an indication of selectable months
for which there are stored images having metadata corresponding to an indicated
month* (Fig 28: whereas months corresponding to stored images can be selected),
*and controlling displaying of an indication of selectable days for which there are
stored images having metadata corresponding to an indicated day* (Fig 29,

paragraph 0104: whereas a specific day/or date can be used as a selectable filtering

option).

Yet, Wilcock et al and Moore et al do not expressly teach *a copy of each image being*

stored in a single location within the memory, each virtual folder including a pointer to

the image location, identifying a calendar entry in a calendar application based on the

image date of at least one image, and providing a suggestion for a metadata subject

*field of the at least one image based on the calendar entry.*__

Yet, Rothmuller et al teaches *identifying a calendar entry in a calendar*

application based on the image date of the at least one image (whereas a calendar

application is shown in Fig. 1, and as explained in paragraphs 0025-0026: one or more

image entries with respect to a calendar date are identified with respect to date and

subject field matching, and can be further displayed in an image area 100)*; providing a*

suggestion for a metadata subject field of the at least one image based on the calendar

entry (paragraphs 0025-0026: whereas, the at least one calendar image entries are

retrieved, and suggested to the user based upon a quality match rating, such as a "best

match" with respect to a subject/attribute field(s))*;*

It would have been of obvious to one of the ordinary skill in the art to have modified

Wilcock et al and Moore et al's method for image storage and retrieval, to have further

helped a user locate/organize images through a designated calendar

application/interface, as similarly taught by Rothmuller et al. The combination would

have allowed Wilcock et al to have "made it easier to search, retrieve, or catalogue

digital images, without having to remember/recall large amounts of information"
(Rothmuller et al, paragraphs 0002-0003).

However, the combination of Wilcock et al, Moore et al, and Rothmuller et al do not
expressly teach *a copy of each image being stored in a single location within the
memory, each virtual folder including a pointer to the image location*.

Yet, Nagaoka teaches *a copy of each image being stored in a single location within
the memory, each virtual folder including a pointer to the image location* (Fig 3: whereas
each Virtual folder/directory includes a pointer to the single image location).

It would have been obvious to one of the ordinary skill in the art at the time of the
invention to have modified Wilcock et al, Moore et al, and Rothmuller et al.'s virtual
folder/database system, such that each folder/directory includes a pointer to a single
image location, as similarly taught by Nagaoka. The combination of Wilcock et al, Moore
et al, Rothmuller et al and Nagaoka would have allowed Wilcock et al to have "improved
the convenience of users in file management improved effectively by enabling the user
to give an arbitrary file name and directory name with maintaining the compatibility with
the existing file management structure" (Nagaoka, column 1, lines 55-64)

With regards to claim 49, which depends on claim 48, Wilcock et al, Moore et al,
Rothmuller et al, and Nagaoka teaches *wherein at least one of the schemes comprises
image date* (as similarly explained in the rejection for claim 48, and is rejected under the
same rationale)*, and comprising additional instructions for performing: providing a user
interface to select at least one date, and displaying information regarding images*

corresponding to the selected date (paragraph 0088-0094: whereas a user uses a filter control in a user interface to specify images corresponding to a specific date). Additionally, Rothmuller et al teaches providing a user interface to *select at least one date*-scheme *component comprising a year, a month or a day*, and displaying information about the images (Fig 1, paragraph 0030: whereas, a user specifies in the search criteria a lower bound and upper bound comprising a specific year, month, and day by means of a time line, and the images are displayed as thumbnails in a user interface).

With regards to claim 51, which depends on claim 48, the combination of Wilcock et al, Moore et al, Rothmuller et al, and Nagaoka teaches control *providing a user interface to select a* date component of a displayed region, as similarly explained in the rejection for claim 49, and is rejected under similar rationale. Additionally, as explained in the rejection for claim 49, selecting a date component, via a time line. This time line, as further explained by Rothmuller et al, is used to "indicate a time period that can be used to search for matching objects in a database", and thus, a time period, is a *subregion* of time *in a displayed region* (Fig 1, reference number 100: a subregion display of days, reference number 250: a subregion display of months and days)). The displayed region in Fig 1, reference 100, shows *images having metadata corresponding to the selected subregion.*

With regards to claim 52, which depends on claim 48, the combination of

Wilcock, Moore et al, Rothmuller et al, and Nagaoka teach:

wherein one of the schemes comprises image date (as similarly explained in the

rejection for claim 49, and is rejected under similar rationale) *and one of the schemes*

comprises one or more image subjects (Rothmuller et al's paragraph 0025: whereas, an

image subject includes the subject of a photo/image), *and wherein the machine-*

executable instructions, when executed, cause the machine to: control providing a user

interface to select at least one date component comprising a year, a month or a day (as

similarly explained in the rejection for claim 49, and is rejected under similar rationale),

control displaying information regarding images in a date-based group, each image in

the date-based group having metadata corresponding to the selected date component

(whereas, when a month is selected, information about the images corresponding to the

month are displayed, as similarly explained in the rejection for claim 58, is rejected

under similar rationale), Additionally, Rothmuller et al further teaches *receive a selection*

of an image in the date-based group (as similarly explained in the rejection for claim 34,

and is rejected under similar rationale), *control displaying information about first and*

second subject-based groups (as similarly explained in the rejection for claim 34, and is

rejected under similar rationale), *the first subject-based group containing images having*

metadata corresponding to a first subject of the selected image (as similarly explained

in the rejection for claim 35, and is rejected under similar rationale), *and the second*

subject-based group containing images having metadata corresponding to a second

subject of the selected image (as similarly explained in the rejection for claim 35, and is

rejected under similar rationale), *receive a selection of the first subject-based group* (as

similarly explained in the rejection for claim 34, and is rejected under similar rationale),

and control displaying information regarding images in the first subject-based group (as

similarly explained in the rejection for claim 34, and is rejected under similar rationale).

8.   Claims 63, 66, and 67 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug.

23, 2001, filed: Feb. 20, 2001), in view of Moore et al (US 20040189707, published:

Sep. 30, 2004, filed: May 27, 2003), in view of Rothmuller et al (US Application: US

2003/0033296 A1, published: Feb. 13, 2003, filed: Jul. 17, 2002), and further in view of

Kobayashi et al (US Application: 2003/0217118, published: Nov. 20, 2003, EEFD: May

16, 2002).

With regards to claim 63, Wilcock et al, Moore et al, and Rothmuller et al teaches

wherein the user interface, as similarly explained in the rejection for claim 14, and is

rejected under similar rationale. However, Wilcock et al, Moore et al, and Rothmuller et

al do not expressly teach wherein the user interface *is delivered to the mobile device.*

Yet, Kobayashi et al teaches *wherein the user interface is delivered to the mobile device*

(paragraph 0040: whereas the user interface is used and controlled through a mobile

device. The mobile device communicating in a wireless communication network

(paragraph 0052))

It would have been obvious to one of the ordinary skill in the art at the time of the

invention to have modified Wilcock et al, Moore et al, and Rothmuller et al's method for

implementing a user interface, such that, the user interface can be delivered to a mobile

device, as taught by Kobayashi et al. The combination of Wilcock et al, Moore et al,

Rothmuller et al, and Kobayashi would have allowed Wilcock et al to have "efficiently

have displayed an album on a portable communication terminal" (Kobayashi et al,

paragraph 0007).

With regards to claim 66, which depends on claim 14, Wilcock et al, Moore et al,

Rothmuller et al, and Kobayashi et al teaches *wherein the user device is a mobile*

device and the communication network is a wireless communication network, as

similarly explained in the rejection for claim 63, and is rejected under similar rationale.

With regards to claim 67, which depends on claim 66, Wilcock et al, Moore et al,

Rothmuller et al, and Kobayashi et al teaches *wherein the user interface is controllable*

by the mobile device, as similarly explained in the rejection for claim 63, and is rejected

under similar rationale.

9.   Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et

al (US 20040189707, published: Sep. 30, 2004, filed: May 27, 2003), in view of

Rothmuller et al (US Application: US 2003/0033296 A1, published: Feb. 13, 2003, filed:

Jul. 17, 2002).

With regards to claim 65,

Moore et al teaches *storing the images in a database at the memory, the database*
including at least one virtual folder corresponding to each of the at least two metadata
schemes a copy of each image being stored in a single location within the memory,
each virtual folder including a pointer to the image location, wherein the processor is
configured to identify, after selection of an image in one virtual folder by a user, other
images having metadata in common with the selected image, wherein the common
metadata is metadata other than the metadata utilized to initially create the virtual folder
(Abstract: whereas a user interface is implemented such that virtual folders are
implemented to allow for exposing regular files and folders based on metadata.
Whereas a user interface (paragraph 0014, 0019) has at least one virtual folder that
corresponds to at least two or more metadata schemes/properties (displaying one or
more image/photo names with respect to a date and year selection (paragraphs 0038,
0104, 0128 of Moore et al)), *the one or more files selected by a user, and other images*
having metadata in common with the selected filter property of one or more images are
displayed upon request. The virtual folders can include files such as photos/images
(The filter criteria and list are dynamic with respect to available documents/photos for
various criteria/groups/stacks as explained in paragraph 0088 and 0089)). Additionally,
Moore et al teaches *controlling providing of a user interface with the at least one virtual*
folder, controlling displaying in the user interface simultaneous indications of years,
months and days that are available for sequential user selection (Fig 10, Fig 28,

paragraphs 0129, 0130: whereas, flexible filter options can be made available, including

years, months, and date), *controlling displaying of an indication of selectable years for*

which there are stored images having metadata corresponding to an indicated year (Fig

10: whereas, years corresponding to stored images can be selected), *controlling*

displaying of an indication of selectable months for which there are stored images

having metadata corresponding to an indicated month (Fig 28: whereas months

corresponding to stored images can be selected), *and controlling displaying of an*

indication of selectable days for which there are stored images having metadata

corresponding to an indicated day (Fig 29, paragraph 0104: whereas a specific day/or

date can be used as a selectable filtering option).

However, Moore et al does not expressly teach *identifying, by a processor, a calendar*

entry in a calendar application based on an image date of at least one image. Providing

a suggestion for a metadata subject field of the at least one image based on the

calendar entry.

Yet, Rothmuller et al teaches *identifying a calendar entry in a calendar application*

based on the image date of the at least one image (whereas a calendar application is

shown in Fig. 1, and as explained in paragraphs 0025-0026: one or more image entries

with respect to a calendar date are identified with respect to date and subject field

matching, and can be further displayed in an image area 100); *providing a suggestion*

for a metadata subject field of the at least one image based on the calendar entry

(paragraphs 0025-0026: whereas, the at least one calendar image entries are retrieved, and suggested to the user based upon a quality match rating, such as a "best match" with respect to a subject/attribute field(s));

It would have been of obvious to one of the ordinary skill in the art to have modified Moore et al's method for image storage and retrieval, to have further helped a user locate/organize images through a designated calendar application/interface, as similarly taught by Rothmuller et al. The combination would have allowed Moore et al to have "made it easier to search, retrieve, or catalogue digital images, without having to remember/recall large amounts of information" (Rothmuller et al, paragraphs 0002-0003).

Response to Arguments

10.   Applicant's arguments with respect to claims 14-16, 18-20, 22-37, 48-, 49, 51, 52, 54-56, 58-60, and 62-67 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to WILSON TSUI whose telephone number is (571)272-

7596. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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December 18, 2009